



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0574; Product Identifier 2019-CE-015-AD; Amendment 39-21340; AD 2020-24-10]

RIN 2120-AA64

Airworthiness Directives; Aerostar Aircraft Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Aerostar Aircraft Corporation (Aerostar) Model PA-60-601P (Aerostar 601P), PA-60-602P (Aerostar 602P), and PA-60-700P (Aerostar 700P) airplanes. This AD was prompted by reports of corrosion on the elevator and aileron balance tubes. This AD requires repetitively inspecting the elevator and aileron balance tubes for corrosion and rust and replacing the tube. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Aerostar Aircraft Corporation, 2265 West Aerostar Way, Hayden Lake, ID 83835; telephone: (208) 762-0338; fax: (208) 762-8349; internet: <https://aerostaraircraft.com>. You may review this referenced service information at the FAA, Airworthiness Products Section,

Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0574.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0574; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: David Herron, Aerospace Engineer, Seattle ACO Branch, FAA, 2200 S 216th St, Des Moines, WA 98198; phone: (206) 231-3544; email: david.herron@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Aerostar Model PA-60-601P (Aerostar 601P), PA-60-602P (Aerostar 602P), and PA-60-700P (Aerostar 700P) airplanes. The NPRM published in the *Federal Register* on June 26, 2020 (85 FR 38338). The NPRM was prompted by reports of corrosion on the elevator and aileron balance tubes, which may be hidden by rubber boots. In the NPRM, the FAA proposed to require repetitively inspecting the elevator and aileron balance tubes for corrosion (pitting and flaking) and rust (discoloration) and replacing the tube.

The FAA is issuing this AD to detect corrosion on the elevator and aileron balance tubes. The unsafe condition, if not addressed, could result in failure of the aileron and elevator balance tubes, jamming of the aileron and/or elevator balance tubes, and loss of control of the airplane.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received comments from three commenters. The commenters were Yankee Aviation Services, Inc. and two individuals. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Withdraw NPRM

An individual commenter requested that the NPRM be withdrawn. The commenter stated there is insufficient data supporting the unsafe condition and questioned the motive for the proposed AD, as Aerostar would benefit financially from the sale of parts needed to comply with the proposed requirements. The commenter observed that Aerostar's service information did not provide details concerning the number, source, or content of the reported events of corrosion and the degree to which the unsafe condition is present in the fleet of Aerostar airplanes. The commenter further stated that the service information and the traditional diligence of the Aerostar owner community are sufficient to address the unsafe condition.

The FAA disagrees. The FAA issues an AD after finding that an unsafe condition exists or is likely to develop in aircraft of a particular type design. For this AD, the FAA reviewed the reports received from Aerostar and the effects that failure of these tubes could have on an airplane. Aerostar initially discovered corrosion on the elevator and aileron balance tubes while conducting maintenance on an airplane. This discovery prompted Aerostar to inspect the other four airplanes in its facility, which resulted in the identification of three additional incidents of corrosion on elevator and aileron balance

tubes. The FAA's analysis of this data determined an unsafe condition exists and warrants corrective action through an AD. To the extent Aerostar has issued service information on this issue, while an operator may incorporate into its maintenance program the inspections in the manufacturer's service bulletin, not all operators are required to do so. In order for these inspections to become mandatory, and to correct the unsafe condition identified in the NPRM, the FAA must issue an AD.

The FAA did not change this AD based on this comment.

Request to Remove Requirement to Replace All Tubes

All three commenters requested that the FAA remove the proposed requirement to replace the elevator and aileron balance tubes even if no corrosion and rust is found during the inspection. Two commenters noted that requiring the replacement of parts found to be airworthy does not promote safety and instead subjects owners to unnecessary expenses. Yankee Aviation Services, Inc., stated the new tubes are the same as those being replaced and do not have corrosion proofing.

The FAA disagrees. The FAA determined that the root cause of the rust and corrosion on the elevator and aileron balance tubes is likely a deficient corrosion protection specification in the initial design and manufacture of these tubes. The commenter is not correct that the new tubes are the same as those being replaced. The existing balance tubes are part number (P/N) 26003-003, Revision L or earlier, while the new replacement balance tubes are P/N 26003-003, Revision M or later, as specified in the service information. The Revision M and later balance tubes have been manufactured with corrosion protection (Zinc Chromate primer) that was not applied on the earlier versions of the tubes. The FAA did not change this AD based on these comments.

Request to Allow Part Repair Instead of Replacement

Yankee Aviation Services, Inc., requested the FAA revise the proposed AD to allow the repair of tubes with rust instead of replacement. The commenter stated that a

tube with light rust and a wall thickness of 0.049 inch could be repaired by being wire brushed and painted with an epoxy paint.

The FAA disagrees. Repairing the tubes without replacement would not address the root cause of the rust and corrosion, which the FAA determined is likely a deficient corrosion protection specification in the initial design and manufacture of these tubes. The Revision M or later balance tubes have been manufactured with corrosion protection (Zinc Chromate primer) that was not applied on the earlier versions of the tubes. The commenter's request would allow the tubes to remain installed on the airplane without this additional corrosion protection. The FAA did not change this AD based on this comment.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information under 1 CFR Part 51

The FAA reviewed Aerostar Service Bulletin SB600-138, dated August 30, 2018. The service bulletin contains procedures for repetitively inspecting the elevator and aileron balance tubes for corrosion (pitting and flaking) and rust (discoloration) and replacing the tubes at a specified time and repetitively if necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the Service Information

This AD does not require completing the reply card and returning it to Aerostar as specified in Step 13 of Part II of the service information.

Costs of Compliance

The FAA estimates that this AD affects 404 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect elevator and aileron balance tubes	1 work-hour X \$85 per hour = \$85 per inspection cycle	Not Applicable	\$85 per inspection cycle.	\$34,340 per inspection cycle.
Replace elevator and aileron balance tubes	8 work-hours X \$85 per hour = \$680	\$1,187	\$1,867	\$754,268

The FAA estimates the following costs to do any necessary replacements that are required based on the results of the repetitive inspections, assuming separate replacement intervals. The FAA has no way of determining the number of airplanes that might need these replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace elevator balance tube	8 work-hours X \$85 per hour = \$680	\$594	\$1,274
Replace aileron balance tube	8 work-hours X \$85 per hour = \$680	\$594	\$1,274

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2020-24-10 Aerostar Aircraft Corporation: Amendment 39-21340; Docket

No. FAA-2020-0574; Product Identifier 2019-CE-015-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Aerostar Aircraft Corporation Model PA-60-601P (Aerostar 601P), PA-60-602P (Aerostar 602P), and PA-60-700P (Aerostar 700P) airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 27; Flight Controls.

(e) Unsafe Condition

This AD was prompted by reports of corrosion on the elevator and aileron balance tubes. The FAA is issuing this AD to detect corrosion on the elevator and aileron balance tubes. The unsafe condition, if not addressed, could result in failure of the aileron and elevator balance tubes, jamming of the aileron and/or elevator balance tubes, and loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections

Within 10 hours time-in-service after the effective date of this AD, inspect the elevator and aileron balance tubes for corrosion (pitting and flaking) and rust (discoloration) by following steps 1. through 3. of Part I (Inspection) of the Instructions in Aerostar Aircraft Corporation Service Bulletin SB600-138, dated August 30, 2018 (Aerostar SB600-138). For each tube replaced as required by paragraph (h) of this AD, using a borescope, repeat the inspection within 10 years after replacing the tube and thereafter as follows:

(1) At intervals not to exceed 10 years as long as no rust is found.

(2) At intervals not to exceed 2 years if only rust is found (without any signs of corrosion).

(h) Replacements

At the following compliance times, replace each elevator and aileron balance tube by following Part II (Replacement) of the Instructions in Aerostar SB600-138, except you are not required to report information to the manufacturer:

(1) Before further flight if corrosion or rust is found (inside or outside the tubes) during the initial inspection required by paragraph (g) of this AD.

(2) At the next 100-hour inspection or at the next annual inspection, whichever occurs first, if no corrosion and no rust is found (inside or outside the tubes) during the initial inspection required by paragraph (g) of this AD.

(3) Before further flight if corrosion is found (inside or outside the tubes) during any repetitive inspection required by paragraph (g) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact David Herron, Aerospace Engineer, Seattle ACO Branch, FAA, 2200 S 216th St, Des Moines, WA 98198; phone: (206) 231-3544; email: david.herron@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Aerostar Aircraft Corporation Service Bulletin SB600-138, dated August 30, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Aerostar Aircraft Corporation, 2265 West Aerostar Way, Hayden Lake, ID 83835; telephone: (208) 762-0338; fax: (208) 762-8349; internet: <https://aerostaraircraft.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 15, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-27894 Filed: 12/17/2020 8:45 am; Publication Date: 12/18/2020]